



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,661	04/16/2001	Niall R. Lynam	DON01 P-875	6443
28101	7590	06/21/2004	EXAMINER	
VAN DYKE, GARDNER, LINN AND BURKHART, LLP 2851 CHARLEVOIX DRIVE, S.E. P.O. BOX 888695 GRAND RAPIDS, MI 49588-8695			SMITH, SHEILA B	
		ART UNIT	PAPER NUMBER	2681

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/835,661	Applicant(s) LYNAM ET AL.
Examiner Sheila B. Smith	Art Unit 2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1)  Responsive to communication(s) filed on 16 April 2001.  
2a)  This action is FINAL.                    2b)  This action is non-final.  
3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

- 4)  Claim(s) 54-66 and 74-90 is/are pending in the application.  
    4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 54-64, 74-82 and 85-90 is/are rejected.

7)  Claim(s) 65, 66, 83 and 84 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## **Application Papers**

- 9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_ .

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 54, 60 rejected under 35 U.S.C. 102(e) as being anticipated by Ul Azam et al. (U.S. Patent Number 5,566,224).

*Regarding claim 54,* Ul Azam et al. discloses a radio frequency communication device including a mirrored surface. Ul Azam et al. further discloses a cellular phone system comprising: a mirror assembly including a mirror case (214), a reflective element (mirror) housed in said case (214), case being substantially electrically non-conducting, and a cellular phone (100) system receiver (101) including an transmitting and receiving antenna (104), said cellular phone (100) system receiver (101) adapted to receive signals and transmit (102) signals with said antenna (103) (which reads on column 2 lines 52-54), said antenna is positioned within mirror case (214) as exhibited in figure 2.

*Regarding claim 60,* Ul Azam et al. discloses a radio frequency communication device including a mirrored surface. Ul Azam et al. further discloses a cellular phone system comprising: a mirror assembly including a mirror case (214), a reflective element (mirror) housed in said case (214), a cellular phone (100) system receiver (101) including an transmitting and receiving antenna (104), and electrical leads coupled to antenna and cellular phone system

receiver adapted to receive signals with transmitting and receiving antenna (103) (which reads on column 2 lines 52-54) and to convert signal into audio signals (which reads on column 2 lines 52-54) and receiving antenna positioned within said case (214) as exhibited in figure 2.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 55-66, 74-82, and 85-90 rejected under 35 U.S.C. 103(a) as being unpatentable over Ul Azam et al. (U. S. Patent Number 5,566,224) in view of Takeuchi et al. (U. S. Patent Number 4,760,394).

***Regarding claims 74 and 86,*** Ul Azam et al. discloses a radio frequency communication device including a mirrored surface. Ul Azam et al. further discloses a cellular phone system comprising: a mirror assembly including a mirror case (214), a reflective element (mirror), and a cellular phone (100) system receiver (101) including an antenna (104), said cellular phone (100) system receiver (101) adapted to receive signals and transmit (102) signals with said antenna (103) (which reads on column 2 lines 52-54), said antenna supported by a wall (which reads on a mirrored surface 209 is fitted into the rear housing 214) of said mirror case (214) as exhibited in figure 2, said antenna having an inherent weight, said inherent weight of said antenna being distributed to said wall of said mirror case and not to supported reflective element

assembly to thereby reduce vibration of said reflective element (which reads on a mounting stalk 212 that extends orthogonally from the rear face surface of the rear housing 214, within the stalk 212, may be cabling that both couples an antenna (similar to the antenna 103 of FIG. 1) and provides power to the circuitry within the rear housing 214 as disclosed in column 4 lines 5-13). However Ul Azam et al. fails to specifically disclose an actuator supporting said reflective element in said mirror case, said actuator permitting adjustment of an orientation of said reflective element in said case, said actuator and said reflective element defining an actuator supported reflective element assembly.

In the same field of endeavor Takeuchi et al. discloses the antenna for transmitting and or receiving radio waves by way of electromagnetic induction. Takeuchi et al. further disclose and an actuator supporting said reflective element in said mirror case (412), said actuator permitting adjustment (which reads on pivotably supports a mirror as disclosed in column 7 lines 42-43) of an orientation of said reflective element in said case, said actuator and said reflective element defining an actuator supported reflective element assembly (which reads on column 7 lines 42-43).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify a radio frequency communication device including a mirrored surface with an actuator supporting said reflective element in said mirror case, said actuator permitting adjustment of an orientation of said reflective element in said case, said actuator and said reflective element defining an actuator supported reflective element assembly as taught by Takeuchi et al. for the purpose of visually concealing the antenna.

***Regarding claims 55, 75,*** Ul Azam et al. discloses everything claimed, as applied above (see claim 74 ) however, Ul Azam et al. fails to specifically discloses a modular housing, said antenna positioned within said modular housing.

In the same field of endeavor Takeuchi et al. discloses the antenna for transmitting and or receiving radio waves by way of electromagnetic induction. Takeuchi et al. et al. further disclose a modular housing (which reads on pivotably supports a mirror as disclosed in column 7 lines 42-43), said antenna positioned within said modular housing (which reads on column 7 lines 42-43).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify a radio frequency communication device including a mirrored surface with a modular housing, said antenna positioned within said modular housing as taught by Takeuchi et al. for the purpose of visually concealing the antenna.

***Regarding claims 56, 61, 76,*** Ul Azam et al. discloses everything claimed, as applied above (see claim 74 ) however, Ul Azam et al. fails to specifically discloses an electronic control module, said antenna mounted on said electronic control module in said mirror case.

In the same field of endeavor Takeuchi et al. discloses the antenna for transmitting and or receiving radio waves by way of electromagnetic induction. Takeuchi et al. further disclose an electronic control module, said antenna mounted on said electronic control module in said mirror case (which reads on column 7 lines 42-43).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the antenna for transmitting and or receiving radio waves by way of electromagnetic induction with an electronic control module, said antenna mounted on said electronic control

Art Unit: 2681

module in said mirror case as taught by Takeuchi et al. for the purpose of visually concealing the antenna.

*Regarding claims 57, 62, 77,* Ul Azam et al. discloses everything claimed, as applied above (see claim 76 ) however, Ul Azam et al. fails to specifically discloses a receiver is mounted to said electronic control module.

In the same field of endeavor Takeuchi et al. discloses the antenna for transmitting and or receiving radio waves by way of electromagnetic induction. Takeuchi et al. further disclose a receiver is mounted to said electronic control module (which reads on column 7 lines 42-43).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the antenna for transmitting and or receiving radio waves by way of electromagnetic induction with a receiver is mounted to said electronic control module as taught by Takeuchi et al. for the purpose of visually concealing the antenna.

*Regarding claims 58, 63, 78,* Ul Azam et al. discloses everything claimed, as applied above (see claim 76 ) however, Ul Azam et al. fails to specifically discloses a housing, said electronic control module being supported in said housing.

In the same field of endeavor Takeuchi et al. discloses the antenna for transmitting and or receiving radio waves by way of electromagnetic induction. Takeuchi et al. further disclose a housing, said electronic control module being supported in said housing (which reads on column 7 lines 42-43).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the antenna for transmitting and or receiving radio waves by way of electromagnetic induction with a modular housing, said antenna positioned within a housing, said electronic

Art Unit: 2681

control module being supported in said housing as taught by Takeuchi et al. for the purpose of visually concealing the antenna.

*Regarding claims 59, 64, 79, 80,* Ul Azam et al. discloses everything claimed, as applied above (see claim 78 ) however, Ul Azam et al. fails to specifically discloses a modular insert mounted in said wall of said case.

In the same field of endeavor Takeuchi et al. discloses the antenna for transmitting and or receiving radio waves by way of electromagnetic induction. Takeuchi et al. further disclose a modular insert mounted in said wall of said case (which reads on column 7 lines 42-43).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the antenna for transmitting and or receiving radio waves by way of electromagnetic induction with a modular insert mounted in said wall of said case as taught by Takeuchi et al. for the purpose of visually concealing the antenna.

*Regarding claim 81,* Ul Azam et al. discloses everything claimed, as applied above (see claim 76 ) however, Ul Azam et al. fails to specifically discloses a electronic control module communicates with at least one electrical component supported in said mirror assembly.

In the same field of endeavor Takeuchi et al. discloses the antenna for transmitting and or receiving radio waves by way of electromagnetic induction. Takeuchi et al. further disclose a electronic control module communicates with at least one electrical component supported in said mirror assembly (which reads on column 7 lines 42-43).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the antenna for transmitting and or receiving radio waves by way of electromagnetic induction with a electronic control module communicates with at least one electrical component

Art Unit: 2681

supported in said mirror assembly as taught by Takeuchi et al. for the purpose of visually concealing the antenna.

***Regarding claims 82, 85,*** Ul Azam et al. discloses everything claimed, as applied above (see claim 74 ) however, Ul Azam et al. fails to specifically discloses a electrical component is supported by said reflective element.

In the same field of endeavor Takeuchi et al. discloses the antenna for transmitting and or receiving radio waves by way of electromagnetic induction. Takeuchi et al. further disclose electrical component is supported by said reflective element (which reads on column 7 lines 42-43).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the antenna for transmitting and or receiving radio waves by way of electromagnetic induction with a electrical component is supported by said reflective element as taught by Takeuchi et al. for the purpose of visually concealing the antenna.

***Regarding claim 87,*** Ul Azam et al. discloses everything claimed, as applied above (see claim 86 ) however, Ul Azam et al. fails to specifically discloses an actuator support member, said actuator support member supporting said actuator in said cavity.

In the same field of endeavor Takeuchi et al. discloses the antenna for transmitting and or receiving radio waves by way of electromagnetic induction. Takeuchi et al. further disclose an actuator support member, said actuator support member supporting said actuator in said cavity (which reads on column 7 lines 42-43).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the antenna for transmitting and or receiving radio waves by way of electromagnetic induction with an actuator support member, said actuator support member supporting said actuator in said cavity as taught by Takeuchi et al. for the purpose of visually concealing the antenna.

*Regarding claim 88*, Ul Azam et al. discloses everything claimed, as applied above (see claim 87 ) however, Ul Azam et al. fails to specifically discloses a antenna is spaced from and independent from said actuator support member.

In the same field of endeavor Takeuchi et al. discloses the antenna for transmitting and or receiving radio waves by way of electromagnetic induction. Takeuchi et al. further disclose a modular housing (which reads on pivotably supports a mirror as disclosed in column 7 lines 42-43), antenna is spaced from and independent from said actuator support member (which reads on column 7 lines 42-43).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the antenna for transmitting and or receiving radio waves by way of electromagnetic induction with a antenna is spaced from and independent from said actuator support member as taught by Takeuchi et al. for the purpose of visually concealing the antenna.

*Regarding claim 89*, Ul Azam et al. discloses everything claimed, as applied above (see claim 86 ) however, Ul Azam et al. fails to specifically discloses a an antenna housing, said antenna housing supporting said antenna and being mounted to said mirror case.

In the same field of endeavor Takeuchi et al. discloses the antenna for transmitting and or receiving radio waves by way of electromagnetic induction. Takeuchi et al. further disclose a

modular housing (which reads on pivotably supports a mirror as disclosed in column 7 lines 42-43), an antenna housing, said antenna housing supporting said antenna and being mounted to said mirror case (which reads on column 7 lines 42-43).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the antenna for transmitting and or receiving radio waves by way of electromagnetic induction with a an antenna housing, said antenna housing supporting said antenna and being mounted to said mirror case as taught by Takeuchi et al. for the purpose of visually concealing the antenna.

*Regarding claim 90,* Ul Azam et al. discloses everything claimed, as applied above (see claim 89 ) however, Ul Azam et al. fails to specifically discloses a an electronic module, said antenna being supported on said electronic module in said antenna housing.

In the same field of endeavor Takeuchi et al. discloses the antenna for transmitting and or receiving radio waves by way of electromagnetic induction. Takeuchi et al. further disclose a modular housing (which reads on pivotably supports a mirror as disclosed in column 7 lines 42-43), an electronic module, said antenna being supported on said electronic module in said antenna housing (which reads on column 7 lines 42-43).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the antenna for transmitting and or receiving radio waves by way of electromagnetic induction with a an electronic module, said antenna being supported on said electronic module in said antenna housing as taught by Takeuchi et al. for the purpose of visually concealing the antenna.

***Allowable Subject Matter***

1. Claims 65,66,83,84 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheila B. Smith whose telephone number is (703)305-0104. The examiner can normally be reached on Monday-Thursday 6:00 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Erika Gary can be reached on 703-308-0123. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Smith *S.S.*  
June 10, 2004

*Erika Gary*  
ERIKA GARY  
PATENT EXAMINER